

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (CANCELLED)
2. (CURRENTLY AMENDED) A method of assessing whether a ~~patient~~ subject is afflicted with or has a pre-disposition for endocrine cancer, the method comprising comparing:
 - (a) levels of kallikrein 12, kallikrein 14 and/or kallikrein 15 or nucleic acids encoding kallikrein 12, kallikrein 14 and/or kallikrein 15 in a sample from the patient; and
 - (b) levels of kallikrein 12, kallikrein 14 and/or kallikrein 15 or nucleic acids encoding kallikrein 12, kallikrein 14 and/or kallikrein 15 in samples of the same type obtained from control subjects, wherein significantly altered levels of kallikrein 12, kallikrein 14 and/or kallikrein 15 or nucleic acids encoding kallikrein 12, kallikrein 14 and/or kallikrein 15 relative to the corresponding levels from control subjects of kallikrein 12, kallikrein 14 and/or kallikrein or nucleic acids encoding kallikrein 12, kallikrein 14 and/or kallikrein 15 is an indication that the patient is afflicted with endocrine cancer.
3. (CURRENTLY AMENDED) A method of claim [[1 or]] 2 wherein levels of kallikrein 14 are compared to levels from control normal subjects and higher levels of kallikrein 14 relative to the levels for normal subjects is an indication that the patient is afflicted with breast or ovarian cancer.
4. (CURRENTLY AMENDED) A method for monitoring the progression of endocrine cancer in a ~~patient~~ subject the method comprising:
 - (a) detecting kallikrein 12, kallikrein 14, and/or kallikrein 15 proteins or nucleic acids encoding the proteins in a sample from the patient at a first time point;
 - (b) repeating step (a) at a subsequent point in time; and
 - (c) comparing the levels detected in (a) and (b), and therefrom monitoring the progression of the endocrine cancer.

5. (CANCELLED)
6. (CANCELLED)
7. (CURRENTLY AMENDED) A method of claim 2 for diagnosing and monitoring ovarian carcinoma in a subject comprising ~~measuring~~ comparing kallikrein 12, kallikrein 14, and/or kallikrein 15 in a sample from the subject.
8. (CURRENTLY AMENDED) A method ~~as claimed in any preceding~~ of claim 2 wherein the kallikrein 12, kallikrein 14, and/or kallikrein 15 is measured using antibodies specifically reactive with kallikrein 12, kallikrein 14, and/or kallikrein 15 or a part thereof.
9. (CURRENTLY AMENDED) A method of claim 2 ~~for screening a subject for endocrine cancer~~ comprising (a) obtaining a biological sample from a subject; (b) detecting the amount of kallikrein 12, kallikrein 14, and/or kallikrein 15 in said sample; and (c) comparing said amount of kallikrein 12, kallikrein 14, and/or kallikrein 15 detected to a predetermined standard, where detection of a level of kallikrein 12, kallikrein 14, and/or kallikrein 15 significantly different than that of a standard is indicative of endocrine cancer.
10. (ORIGINAL) A method of claim 9 wherein levels of kallikrein 14 are compared with normal levels and higher levels of kallikrein 14 in the sample compared with the normal levels is indicative of ovarian cancer or breast cancer.
11. (ORIGINAL) A method of claim 10 comprising
 - (a) incubating a biological sample from the subject with a first antibody specific for kallikrein 12, kallikrein 14, and/or kallikrein 15 which is directly or indirectly labeled with a detectable substance, and a second antibody specific for kallikrein 12, kallikrein 14, and/or kallikrein 15 which is immobilized;
 - (b) detecting the detectable substance thereby quantitating kallikrein 12, kallikrein 14, and/or kallikrein 15 in the biological sample; and
 - (c) comparing the quantitated kallikrein 12, kallikrein 14, and/or kallikrein 15 with levels for a predetermined standard.
12. (CURRENTLY AMENDED) A method of claim 2 for diagnosing and monitoring endocrine cancer in a sample from a subject comprising isolating nucleic acids;

- ~~preferably mRNA~~, from the sample, and detecting *KLK12*, *KLK14*, and/or *KLK15* nucleic acids in the sample.
13. (ORIGINAL) A method as claimed in claim 12 wherein the presence of different levels of *KLK12*, *KLK14*, and/or *KLK15* nucleic acids in the sample compared to a standard or control is indicative of disease, disease stage, and/or prognosis.
 14. (CURRENTLY AMENDED) A method of claim 2 for determining the presence or absence of ovarian cancer in a subject comprising (a) contacting a sample obtained from the subject with an oligonucleotide that hybridizes to *KLK12*, *KLK14*, and/or *KLK15*; and (b) detecting in the sample a level of polynucleotide that hybridizes to the *KLK12*, *KLK14*, and/or *KLK15* relative to a predetermined cut-off value, and therefrom determining the presence or absence of ovarian cancer in the subject.
 15. (ORIGINAL) A method as claimed in claim 14, wherein the polynucleotide is mRNA and the level of polynucleotide is detected by polymerase chain reaction.
 16. (ORIGINAL) A method as claimed in claim 14 wherein the polynucleotide is mRNA and the amount of mRNA is detected using a hybridization technique, employing oligonucleotide probes that hybridize to *KLK12*, *KLK14*, and/or *KLK15*, or a complement of *KLK12*, *KLK14*, and/or *KLK15*.
 17. (ORIGINAL) A method of claim 16 comprising (a) contacting a sample obtained from the subject with oligonucleotides that hybridize to one or both of *KLK14* or *KLK15*; and (b) detecting in the sample levels of polynucleotides that hybridize to one or both of *KLK14* or *KLK15* relative to a predetermined cut-off value, and therefrom determining the presence or absence of ovarian cancer in the subject.
 18. (CURRENTLY AMENDED) A method of claim 12 [[or 13]] wherein one or both of *KLK14* and *KLK15* mRNA is detected by (a) isolating mRNA from a sample and combining the mRNA with reagents to convert it to cDNA; (b) treating the converted cDNA with amplification reaction reagents and nucleic acid primers that hybridize to one or both of *KLK14* and *KLK15*, to produce amplification products; (d) analyzing the amplification products to detect amounts of one or both of *KLK14* and *KLK15* mRNA; and (e) comparing the amounts of mRNA to amounts detected against a panel of expected values for normal and malignant tissue derived using similar nucleic acid primers.

19. (CURRENTLY AMENDED) A method of ~~any preceding~~ claim 2 wherein higher levels of KLK14 in patients compared to a control is indicative of early stage disease (Grade I or II), optimal debulking, longer progression free disease and overall survival, and/or that the subject is responsive to chemotherapy.
20. (CURRENTLY AMENDED) A method of ~~any preceding~~ claim 2 wherein higher levels of KLK15 in patients compared to a control are indicative of ovarian cancer.
21. (CURRENTLY AMENDED) A method of ~~any preceding~~ claim 2 wherein higher levels of KLK15 in patients compared to a control are indicative of reduced progression free survival and overall survival.
22. (CANCELLED)
23. (CANCELLED)
24. (CANCELLED)
25. (CANCELLED).
26. (CANCELLED)
27. (CANCELLED)
28. (CURRENTLY AMENDED) A method of ~~any preceding~~ claim 2 wherein the sample comprises serum.
29. (CANCELLED)
30. (CANCELLED)
31. (CANCELLED)
32. (CURRENTLY AMENDED) A kit for carrying out a method as claimed in ~~any preceding~~ claim 2.
33. (CANCELLED)
34. (CANCELLED)
35. (CANCELLED)
36. (CANCELLED)